## 6.1.2.4 HARVEST SEASON AND ADDUCTOR MUSCLE WEIGHT

The general harvest season for bay scallops in North Carolina has remained relatively unchanged since the 1920s with a few short openings due to social or predator interaction concerns (Gutsell 1928; D. Taylor, DMF, personal communication 2005). The main harvest season begins in January when peak landings (average 670 bushels) occur and landings slowly diminish as the season progresses to the last Friday in May (Figure 6.4). Shorter opening in recent years included: four days in December of 1994 to 1998 and a limited season in a small area of Back Sound, North River, and Straits from August 1 to September 15 in 2001 to 2003 to allow harvest before the cownose ray migration and resulting predation. An average of 590 trips per year were taken from 1994 to 2004 (Figure 6.4). The average harvest from 1994 to 1998 in December was 188 bushels however meat yields tend to be increasing (Figure 6.4 and 6.5). The average total harvest for the month of August during 2001 to 2003 was 30 bushels.

A relationship between meat weights and gonadal development guides fisheries managers in setting the bay scallop season. The season allows for the completion of spawning and an increase in meat size in order to obtain the highest yield. In general, adductor meat weights are at their lowest during the fall when gonad development is high (Figure 6.5). After bay scallops begin to spawn in October, meat weights begin to increase with maximum meat weights occurring from February to May (Figure 6.5) (Spitsbergen 1979; Kellogg and Spitsbergen 1983).